# Montana's Immune Response Special Assessment Edition JANUARY 2004

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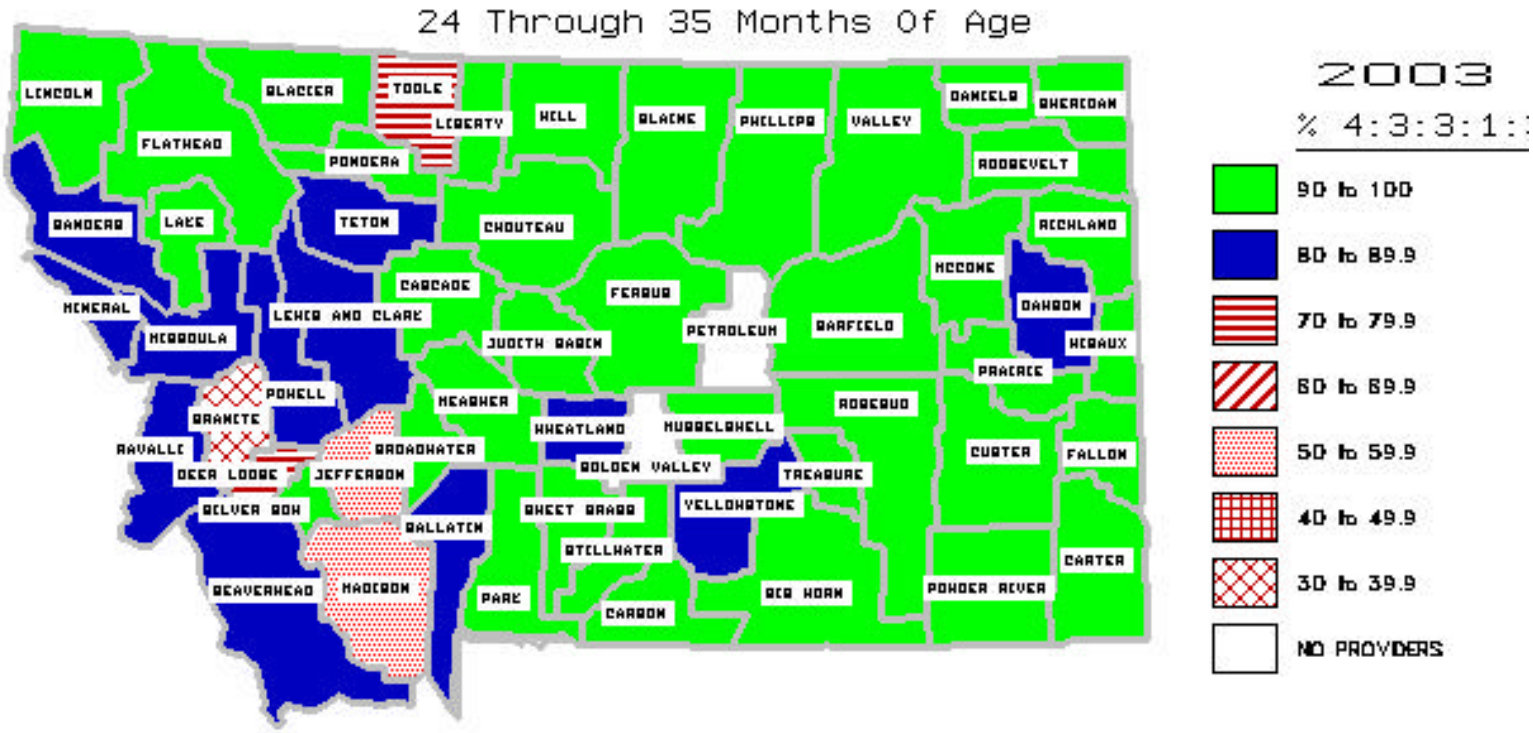


***STATEWIDE/ COUNTYWIDE COVERAGE***

Countywide vaccination coverage, for the serial antigen combination 4DTaP: 3Hib: 3Polio: 1MMR: 3Hep B (as displayed on the state map) represents an aggregate of all vaccination provider data for any given county. 2,721 provider-based children representing 25.41% of the birth cohort were assessed. Aggregation of all data reveals STATEWIDE Coverage for the vaccine series has, *for the first time since 1999*, dropped below the 90 percentile goal to **89.7%.**

## *NIS: SHOCK OF THE DROP*

The National Immunization Survey (NIS) results of Immunization Coverage in the US (January – December 2002) show Montana coverage for the serial antigen combination at 66.6 ±6.8%. According to NIS statistics ***Montana now ranks 4th from the bottom*** in states vaccination coverage for 2-year-olds with our coverage dropping by **minus 11 ±8.4%** since last year. Although, children are to complete the vaccination series by 19 months NIS reports Montana coverage of 19-month-olds to **be bottomed out at 58 ±7%.**

## THE DIFFERENCE IN RATES

The gap between NIS rates and our own survey are, in part, accounted for by the following reasons:

- NIS measures completion of the series **at** 24-months-of-age, and our survey is **through** 35 months of age.

Continue next page.

*Continued from front page*. Montana Immunization Program defines a 2-year-old as being 2 until they turn 3. This definition allows an additional 11-months in which a child may be counted as up-to-date.

- NIS is a random digit dialing survey. The Montana survey consists of provider-based children. NIS, therefore, will reach some children who have never visited a health care provider. Such children are more likely to be un-immunized.
- While these reasons account for some of the differences between the two surveys, the fact remains that **our vaccination rates are dropping to below acceptable levels.**

***"Knowing is not enough; we must apply. Willing is not enough we must do."-Goethe***

## WHY DO RATES MATTER

- In a country of 280 million (U.S.), consider a vaccine with a 95% efficacy rate. This means 14 million people remain unprotected even <u>if coverage levels of 100%</u> are achieved.
- For certain diseases, like varicella or measles, a minimum of 95% of the population must be immunized to eliminate transmission (**with 95% coverage 28 million now are at risk** but as long as they remain in the US, and disseminated from each other, they are, in large measure, protected by herd immunity).
- For epidemiological reasons, any lower coverage results in transmission of disease and shifts the age of the cases to an age where complications and case-fatality ratio are much higher.
- Diseases reappear when immunization coverage drops: Many people in North America and Europe have become complacent about vaccines, assuming that since certain diseases rarely appear, they are no longer a threat. Others fear that the vaccine itself is more dangerous than the disease. These misperceptions have caused a resurgence of highly contagious diseases such as measles, diphtheria, and pertussis.
- A measles outbreak in the United States in 1989 led to 123 deaths—ninety percent of those who died had not been vaccinated.
- In England and Wales, anti-immunization groups caused parents to question the value of pertussis vaccine in the mid-1970s. As a result, immunization rates fell from 81 percent to 31 percent in a span of just a few years. Two epidemics of whooping cough followed, and many children died needlessly
- In Russia, a breakdown in the immunization program in the early 1980s resulted in a massive epidemic of diphtheria that peaked in 1995. Infections rose from less than a thousand people in 1980 to more than fifty thousand people in 1995. Controlling the outbreak required expensive and difficult mass immunization campaigns until the routine immunization program was functioning again.

For reasons such as these, the national goal for series complete coverage is set at a minimum completion rate of 90%. High rates of coverage translate into real world meanings such as, reduction of pain, crippling, death, and tremendous savings in the burden of health care.

- **Effect of Varicella Vaccine on Epidemiology of Varicella**: Montana ranks last in varicella vaccine coverage levels. Please read.

Health care providers who withhold varicella immunization from young children because of fear of creating a cohort of adults at risk for serious varicella disease are creating a self-fulfilling prophecy! If immunization rates for young children remain low, the number of children who become susceptible adults <u>will</u> increase, as will the opportunities for these susceptible adults to contract varicella from unimmunized children. However, if varicella vaccine coverage in children is more than 90%, a greater proportion of cases will occur at older ages, but the **varicella disease burden will <u>*decrease*</u> for children *and* adults.**

## National Immunization Survey 2002: Estimated Vaccination coverage with 1 or more Varicella doses by Coverage Level and State. Coverage in estimated rank order

National Coverage = 81% **Montana Ranks Dead Last!!!**

| | | | | | |
|---|---|---|---|---|---|
| District of Columbia | 91.1±4.8 | Hawaii | 81.6±5.2 | New Hampshire | 73.9±6.2 |
| Alabama | 89.3±3.8 | Tennessee | 81.1±4.1 | Oregon | 73.7±5.6 |
| Georgia | 89.2±3.4 | Oklahoma | 81.0±5.8 | Minnesota | 73.6±6.2 |
| Rhode Island | 88.9±4.9 | New York | 81.0±4.1 | Maine | 73.0±6.0 |
| Arkansas | 88.7±4.1 | Florida | 80.8±4.4 | South Dakota | 71.2±6.5 |
| Maryland | 87.7±4.8 | New Mexico | 80.5±5.9 | Indiana | 70.0±5.3 |
| Massachusetts | 87.0±3.9 | New Jersey | 80.2±5.4 | Illinois | 69.9±5.1 |
| Connecticut | 86.5±4.6 | Colorado | 79.8±5.5 | North Dakota | 67.4±6.7 |
| South Carolina | 86.0±5.4 | Wisconsin | 79.8±4.0 | Iowa | 66.5±6.2 |
| Delaware | 86.0±4.2 | Arizona | 78.6±3.9 | Vermont | 66.5±6.0 |
| California | 85.1±3.2 | Kentucky | 78.3±6.0 | Idaho | 65.9±6.0 |
| Pennsylvania | 84.7±4.9 | Utah | 78.1±5.5 | Wyoming | 65.2±6.5 |
| Louisiana | 83.4±4.0 | Mississippi | 77.5±5.9 | Washington | 65.1±5.1 |
| Virginia | 83.0±5.4 | Missouri | 77.1±5.8 | Alaska | 63.6±6.5 |
| Michigan | 83.0±5.0 | Kansas | 76.2±5.5 | **Montana** | ***59.2±6.9*** |
| Texas | 82.9±4.1 | Ohio | 75.4±4.4 | | |
| North Carolina | 81.8±5.9 | Nebraska | 74.8±5.8 | | |
| West Virginia | 81.8±4.8 | Nevada | 74.7±6.1 | | |

Children in the 2002 National Immunization Survey were born between February 1999 and May 2001.

## Montana Immunization Program Survey: Estimated Vaccination coverage with 1+Varicella by Coverage Level and County. Coverage in estimated rank order

| | | | | | |
|---|---|---|---|---|---|
| CUSTER | 100 | ROOSEVELT | 80.3 | STILLWATER | 65.0 |
| DANIELS | 100 | POWDER RIVER | 80.0 | POWELL | 62.5 |
| GLACIER | 100 | LIBERTY | 80.0 | MADISON | 60.9 |
| MEAGHER | 100 | CARBON | 79.3 | CHOUTEAU | 51.0 |
| FERGUS | 95.2 | SHERIDAN | 77.4 | FALLON | 50.0 |
| WHEATLAND | 94.7 | PHILLIPS | 76.2 | LINCOLN | 50.0 |
| DAWSON | 92.0 | PONDERA | 75.0 | GALLATIN | 49.6 |
| SILVER BOW | 90.4 | MINERAL | 73.7 | PARK | 46.3 |
| CASCADE | 87.0 | MISSOULA | 71.9 | GRANITE | 43.5 |
| YELLOWSTONE | 86.1 | GARFIELD | 71.4 | RICHLAND | 39.6 |
| PRAIRIE | 85.7 | LAKE | 70.8 | MUSSELSHELL | 35.3 |
| BROADWATER | 84.6 | LEWIS & CLARK | 70.8 | SWEETGRASS | 33.3 |
| McCONE | 84.6 | BLAINE | 70.5 | TOOLE | 29.7 |
| HILL | 84.2 | RAVALLI | 70.2 | SANDERS | 21.2 |
| BIG HORN | 84.1 | FLATHEAD | 69.4 | BEAVERHEAD | 14.7 |
| VALLEY | 84.0 | TETON | 67.4 | CARTER | 0.0 |
| ROSEBUD | 82.7 | JUDITH BASIN | 66.7 | JEFFERSON | 0.0 |
| DEER LODGE | 81.4 | WIBAUX | 66.7 | TREASURE | 0.0 |

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Children in the 2003 Montana Survey were born between March 2000 and December 2001.

## Cases of Positive Hepatitis C by County As of January 8, 2004

Following numerous requests from Public Health Nurses during the Integrated STD/HIV, Hepatitis workshops, we are providing a listing of all positive hepatitis C in the DPHHS database for each county. The numbers indicate that public health needs to increase education and counseling to promote wellness and to prevent further injury to the liver.

| | | | | | |
|---|---|---|---|---|---|
| Beaverhead | 24 | Jefferson | 13 | Richland | 17 |
| Big Horn | 79 | Lake | 220 | Roosevelt | 57 |
| Blaine | 70 | Lewis & Clark | 671* | Rosebud | 63 |
| Broadwater | 4 | Liberty | 8 | Sanders | 43 |
| Carbon | 19 | Lincoln | 63 | Sheridan | 5 |
| Carter | 1 | Madison | 8 | Silverbow | 299 |
| Cascade | 656 | McCone | 2 | Sweet Grass | 4 |
| Chouteau | 7 | Meagher | 1 | Teton | 11 |
| Custer | 93 | Mineral | 9 | Toole | 103 |
| Daniels | 2 | Missoula | 613 | Treasure | 4 |
| Dawson | 55 | Musselshell | 23 | Valley | 20 |
| Deer Lodge | 48 | Park | 79 | Wheatland | 3 |
| Fallon | 5 | Petroleum | 1 | Wibaux | 2 |
| Fergus | 19 | Phillips | 7 | Yellowstone | 1,404 |
| Flathead | 371 | Pondera | 9 | * Includes Ft. Harrison | |
| Gallatin | 271 | Powder River | 2 | | |
| Glacier | 152 | Powell | 135 | | |
| Granite | 1 | Prairie | 1 | | |
| Hill | 209 | Ravalli | 91 | | |

**CDC has a new Spanish hepatitis web site. Access is at WWW.cdc.gov/Spanish/enfermendades/hepatitis/**

## Lighthouse Awards

*The Montana Immunization Program is proud to recognize outstanding leadership efforts of Montana Vaccine providers and partners. We are pleased to recognize the following Lighthouse Award recipients:*

**Nora Gerrity, MD**, **Lyn Skolrud, Amber Fuhringer, Robin Chrisman, Tammie Zuidema, Leann Evatt, Faye Dedmon, Linda Urquhart and Randi Ghekiere of The Great Falls Clinic,** Great Falls, for outstanding efforts in collaboration with the Cascade County Public Health Dept. for county immunization registry efforts.

**Trixie Smith, RN; Sherry Floerchinger, LPN; Carla Peebles, LPN; Jodee Levandowski, RN; Janet Weber, RN; Teresa O'Connell, RN; Marilyn Clinger, Marilyn Kersch and Mary Hamann, Disease Prevention Services, Cascade City County Health Department, Great Falls,** for leadership in collaboration with the Great Falls Clinic in county immunization registry efforts.

Hats off to all of these folks for their constant efforts and dedication! They are truly lighting the way!

# EXPANSION OF THE "READING WELL"

**"The Reading Well" project, which encourages children to "be well - read well", is expanding. The MT Immunization & Medicaid Programs are working with the MT Office Of Public Instruction to expand this program to children receiving their kindergarten shots.**

## WHO IS ELIGIBLE?

All Montana children aged 24 to 35 months, **AND NOW**
**All Montana children - aged 4 years or older - receiving their kindergarten shots**

## WHAT ARE THE GOALS?


Promote wellness by increasing the immunization rates for all Montana children,
Increase the records in the statewide immunization registry,
Improve language development and literacy,
Encourage positive one-on-one time between parents and children, and
**Facilitate ease of Kindergarten enrollment.**

## WHEN WILL THIS PROJECT START?

**NOW! The books for kindergarten enrollment incentive have been sent to all Tribal, IHS, and County Public Health Departments.**

## WHERE CAN THIS PROJECT BE USED?

This "expanded" project can mirror the protocol already in place for your two year olds. It can also be completed during annual "kindergarten roundup clinics". Schools and health departments are encouraged to work together.

**1A - Assess the immunization records for 24 to 35 month old children -**
**A total of 14 shots:** 4 - DTPs (diphtheria, tetanus, pertussis), 3 Polio, 1MMR (measles, mumps, rubella) after the first birthday, 3 Hepatitis B; and 3 HIB (Haemophilus influenza type B).

**1B - Assess the immunization records for Kindergarten entry -**
**Completion of the above shots - PLUS**:
1 DTaP and 1 Polio – both given after the 4th birthday, and
****A 2nd MMR - given at least 28 days after the first one - is now recommended for Kindergarten entry**

**2 - If the record is complete:**
Give the child a book. Enter the vaccination information into the registry.

**3 - If the record is not complete:**
Give immunizations, or refer the child to their health care provider. When the needed immunizations are completed, give the child a book. Enter the vaccine information into the registry.

## WHY DOES THIS PROGRAM EXIST?

**Fully immunized children greatly decrease the incidence of preventable diseases among all Montana children.**
**Reading to children helps them develop their speech and language skills, which relates to how well they perform in school.**
**Spending this type of time together is also a great way to bond with your toddler.**

## TO ORDER MORE BOOKS - CONTACT:

Medicaid Program at: 444-1834 Or The Immunization Program at: 444-5580

## Immunization Program Staff

| | |
|---|---|
| Program Office Manager | Joyce Burgett-444 - 5580 |
| Office Manager | Trudy Hawe-444 - 5580 |
| Nurse Consultant | Marci Eckerson-444 - 1805 |

## Health Service Specialists

| | |
|---|---|
| Tim Horan | 444 - 1613 |
| Laura Baus | 444 - 6978 |
| Beth Cottingham | 444 - 2969 |
| Liz LeLacheur | 444 - 0277 |
| Jim Aspevig | 444 - 5441 |
| Office Fax | 444 - 2920 |

**Pharmacy:** Jerry & Sharon Dotter 723 - 4099
Fax: 723 - 4059

## UP-COMING EVENTS

***Spring MPHA:*** May 11, 12, and 13

***Infant Immunization Week:*** April 13 – 19

***National Public Health Week:*** *"Eliminating Health Disparities*: Communities Moving From Statistics To Solutions." April 5 – 11, 2004.

Every Child by Two: April 2, 2004 (12 – 2:30 pm)